

ABSTRACT OF THE DISCLOSURE

Oxide based ceramic matrix composites (CMC) having superior properties at high temperatures exhibit a sol gel matrix with mixed or blended metal oxide particles. The sol-gel matrix is an aqueous colloidal suspension of a metal oxide, preferably from about 10 wt% to about 25 wt% of the metal oxide, and preferably containing a metal oxide such as alumina (Al_2O_3), silica (SiO_2) or alumina-coated silica. The mixture is then infiltrated into a ceramic fabric, gelled, dried and sintered to form the CMC of the present invention. Methods for making the CMC of the present invention are also provided.